IN THE CLAIMS:

1-19 (cancelled).

Please add new claims 20-35 as follows:

20. (new) A heating resistor type air flow rate measuring apparatus for measuring an air flow rate with a heating resistor installed in an air passage, comprising:

a couple of heating resistors installed in the air passage, each of said heating resistors outputting a respective output signal;

wherein a compensated air flow rate signal is output irrespective of the flow direction by correcting a difference value between the output signal of one heating resistor and the output signal of the other heating resistor.

21. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein said correcting of the difference value is performed by multiplying a constant value or a variable constant determined in response to an air flow rate and the difference value between output signals of said two heating resistors.

22. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein said two heating resistors are placed at closed positions where said two heating resistors interfere thermally with respect to air flow.

23. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein an output signal of a heating resistor placed at a upper stream of an air flow is used as said reference output signal of said heating resistor used as a reference.

24. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein said two heating resistors include two independent drive circuits.

25. (new) A heating resistor type air flow rate measuring apparatus according to claim 24, wherein output signals obtained by said two heating resistors are adjusted by a circuit so as to be identical to each other with respect to an air flow from a certain direction.

26. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein

a heating resistor, a driving circuit associated with said heating resistor, a sub air passage in which said heating resistor is installed, and a connector part used as an interface to an outside are formed as a single module; and

a penetration hole connecting between an inside part and an outside part of a main air passage part composite member contains at least said sub air passage part in said major air passage.

27. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein a filter is mounted between an output part for an output signal and an input part for an air flow rate signal in a control unit for a fuel injection control.

28. (new) A heating resistor type air flow rate measuring apparatus according to claim 20, wherein a fuel injection control is performed in response to an output signal.

29. (new) A heating resistor type air flow rate measuring apparatus according to claim 21, wherein

a heating resistor, a driving circuit associated with said heating resistor, a sub air passage in which said heating resistor is installed, and a connector part used as an interface to an outside are formed as a single module; and

a penetration hole connecting between an inside part and an outside part of a main air passage part composite member contains at least said sub air passage part in said major air passage.

30. (new) A heating resistor type air flow rate measuring apparatus according to claim 22, wherein

a heating resistor, a driving circuit associated with said heating resistor, a sub air passage in which said heating resistor is installed, and a

connector part used as an interface to an outside are formed as a single module; and

a penetration hole connecting between an inside part and an outside part of a main air passage part composite member contains at least said sub air passage part in said major air passage.

31. (new) A heating resistor type air flow rate measuring apparatus according to claim 23, wherein

a heating resistor, a driving circuit associated with said heating resistor, a sub air passage in which said heating resistor is installed, and a connector part used as an interface to an outside are formed as a single module; and

a penetration hole connecting between an inside part and an outside part of a main air passage part composite member contains at least said sub air passage part in said major air passage.

32. (new) A heating resistor type air flow rate measuring apparatus according to claim 24, wherein

a heating resistor, a driving circuit associated with said heating resistor, a sub air passage in which said heating resistor is installed, and a connector part used as an interface to an outside are formed as a single module; and

a penetration hole connecting between an inside part and an outside part of a main air passage part composite member contains at least said sub air passage part in said major air passage.

33. (new) A heating resistor type air flow rate measuring apparatus according to claim 25, wherein

a heating resistor, a driving circuit associated with said heating resistor, a sub air passage in which said heating resistor is installed, and a connector part used as an interface to an outside are formed as a single module; and

a penetration hole connecting between an inside part and an outside part of a main air passage part composite member contains at least said sub air passage part in said major air passage.

34. (new) A heating resistor type air flow rate measuring apparatus having a couple of heating resistors thermally interfering with each other with respect to an air flow, each heating resistor including an independent drive circuit, wherein respective output signals of the two heating resistors, which correspond to an air flow rate, being adjusted so that both output signals are the same with respect to an air flow in one direction and said output signals of respective heating resistors being compensated irrespective of the flow direction by correcting a difference value of said output signals of said two heating resistors.

35. (new) A heating resistor type air flow rate measuring apparatus according to claim 34, wherein an intake air flow rate signal is obtained by correcting a difference value between an output signal of one heating resistor and an output signal of the other heating resistor onto a reference output signal obtained by a heating resistor used as a reference.